



AIMS

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THE CONCEPT OF SUSTAINABILITY IN AFRICA

Energy and Sustainability

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Introduction

Africa is endowed with rich and diverse renewable and non-renewable natural resources, yet its people remain among the poorest in the world. Improving the welfare of people in Africa requires sustainable development supported with peace and stability, and with human, institutional and organizational capacities to address immediate challenges, such as poverty and diseases.[1] The word 'sustain' has been in existence for thousands of years. It comes from the Latin word *sustenare* meaning "to hold up" which means to support. From there it evolved long ago to mean to keep something going or extend its duration, with an overtone of providing the support or necessities that made the extended duration possible. One of the most fashionable phrases within the international development fraternity is the notion of 'sustainability'.

The World Commission on Environment and Development - the Brundtland Commission- in its 1987 report defined Sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In as much as the statement has become the most popularly accepted definition of sustainability the same unfortunately cannot be said in practice, especially about developing regions of the world. Agricultural practices, mining processes and land management systems in Africa and other third world regions for instance give very little or no consideration at all to sustainability.[2] While the modern concept of sustainable development is derived mostly from the 1987 Brundtland Report, it is also rooted in earlier ideas about sustainable forest management and twentieth-century environmental concerns. As the concept developed, it has shifted its focus more towards the economic development, social development and environmental protection for future generations. It has been suggested that "the term 'sustainability' should be viewed as humanity's target goal of human-ecosystem equilibrium, while 'sustainable development' refers to the holistic approach and temporal processes that lead us to the end point of sustainability"[3]

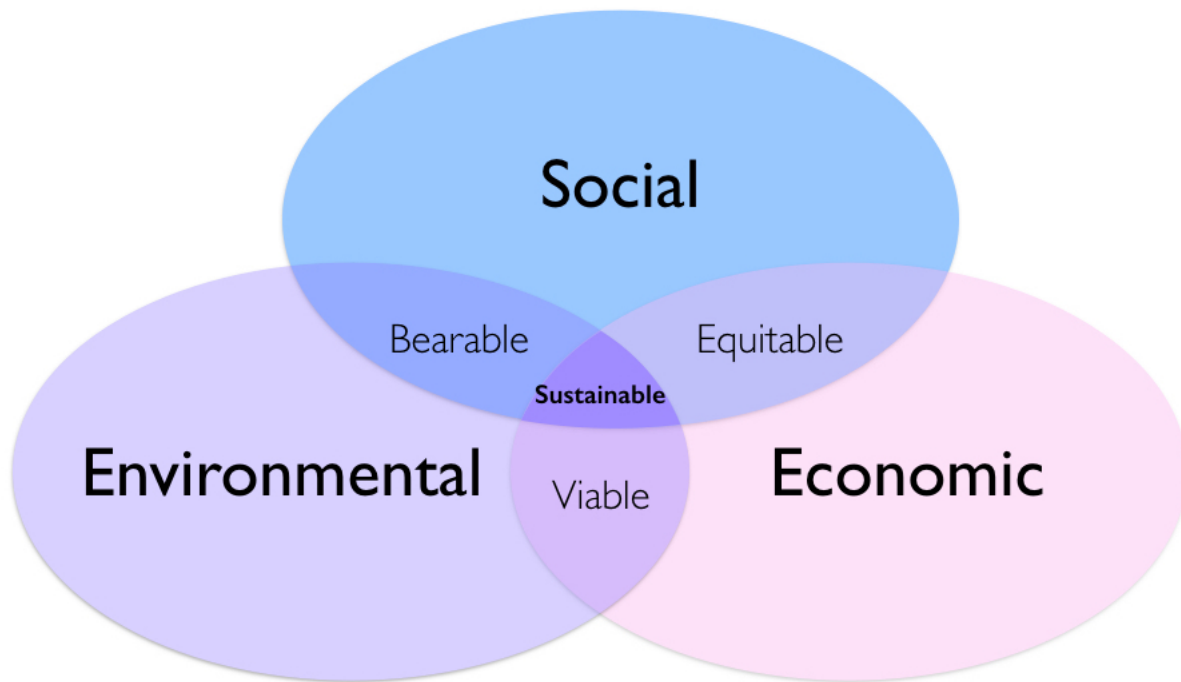


Figure 1: The three pillars of sustainability

The concept of sustainable development has been, and still is, subject to criticism, including the question of what is to be sustained in sustainable development. It has been argued that there is no such thing as a sustainable use of a non-renewable resource, since any positive rate of exploitation will eventually lead to the exhaustion of earth's finite stock.[3]

Aims and objective

In this study we aim to analyze the concept of sustainability in african

Research Questions

- i How did sustainability evolved in Africa?
- ii What are the different approaches to sustainability in Africa (Now and in the time past)?
- iii What are the challenges of sustainability in African?
- iv What is the way forward of sustainability in African?

1 How does sustainability evolved in Africa?

Sustainability, a concept that came up in the context of growing awareness of an impending ecological crisis, as been one of the driving force of the world

history towards the end of the 20th century [4] A, Du Pisani, 2006), therefore a quick review into the history of evolution of this concept most especially in African will be fundamental in understanding it. What brought about the concept, What does it really imply Historically, and how relevant is it.

Talking about the evolution of sustainability in general the word sustainability and sustainable appeared in the Oxford English Dictionary for the very first time in the second half of the 20th century and have been in use for centuries[4]. Van Zon, (2002) did mention that the demand for raw materials and the impact on the environment have been a constant issue throughout human history.

As early as the ancient Egyptian civilizations environmental problems such as deforestation and the salinization and loss of fertility of soil occurred, which we would today refer to as sustainability problems.

Considering Africa environmental problem, Kaniaru (1998) came up with a suggestion that the evolution of the problem of sustainability should be track back from the pre -independence era to the colonial and the post - independence periods.

● **The pre - colonial period**

During this period African had all around established institutional plans for the management of common resources in the interest of the community. Institutions organized in the form of kingdoms, chiefdoms, and customs, provided its citizens access to living and non-living resources that were in congruity with the environment. Measures were being put in place to checkmate over - exploitation of natural resources. Preservation of wildlife was governed by traditional taboos and customs which succeeded in preventing indiscriminate killing of animals, especially the rare species.

● **Colonial administration and the emergence of nation -states**

With the introduction of colonialism and emergence of nation - state has put african organization, customs and taboos in jeopardy, as traditional resources management systems were replaced by commercial interest. Foundations that fitted the Africans tradition and their needs were crushed in the pioneer organizations. Clashes between African conventional traditions and colonial values turned into the order of the day. Development techniques depended on western models and outfitted to served the colonial master instead of the subjects. More or less, improvement during the colonial period was directed by the political and monetary considerations of the colonizers who viewed the natural environment as a free decent; their significant distraction was to control and adventure it for their own benefits.

• The post - independence period

At independent African governments didn't prevail with regards to changing the state of affairs left by the colonial government. Environmental considerations were separated from monetary advancement activities and this brought about grave ecological issues: endemic ailments and pestilences, deforestation and desertification, serious and significant stretches of dry season, lack of water and fuel, specifically fuel wood, pest infestations and invasions, floods and general ecological debasement.[5] Many African countries over the past decade have identified sustainable development as being a pillar of their national development strategy, along with more inclusive growth and better governance and are now seeing the need for sustainability. For instance the term sustainability development first came up in an official document signed by thirty-three African countries in 1969, under the backing of the International Union for Conservation of Nature (IUCN). At the pan-African level, too, emphasis has been placed on embarking on a more sustainable development path. Often, this orientation stems from a growing recognition of the value of Africa's natural resources and apprehension at the anticipated ravages of climate change on the continent.[6]

2 What are the different approaches to sustainability in Africa

Understanding, approaches, theories and strategies for sustainability differ widely from each other, especially as regards the meaning and perception of development, the level and kind of participation or the way environmental issues are addressed and understood in context. The achievement of sustainability in national development requires a strategic approach, which is both long-term in its perspective and integrated or joined-up in linking various development processes so that they are as sophisticated as the challenges are complex. Different approaches has been adopted by African Countries to attain sustainable development few of such which includes project-based approach, Programmatic approach and integrated approach.

• Programmatic Approach

The idea of programs or programmatic approaches in the development cooperation context emerged in the late 1980s, in response to slow progress in achieving tangible impacts in developing countries through the project support modality. This notion arises as a result of concern among the donor community that the project-based approach was unsustainable and inefficient in creating "economic growth and self-reliance" [7]. One of the factors pin-pointed as a root cause of the lack of sustained results was the lack of ownership of the development process by the recipient countries, while others noted the dispersion. These

concerns were initially formalized with the introduction of the concept of the program approach in United Nations resolution 44/211 of 22 December 1989, which called for more integrated and co-ordinated programming in which programming processes would be based on an overall national program framework to be prepared by the recipient Government which would enable the system to support more effectively the development priorities of developing countries and to be more country-focused. Following this request, in 1993, a definition of the program approach to development was agreed to by all United Nations agencies [8] Even though, interaction among public, business and civil society actors is needed to map and rehearse the kinds of institutions needed in the future. Besides integration across key sectors and partners (horizontal integration) integration among the national, subnational and local levels (vertical integration) within a country is also required to achieve the SDGs and Agenda 2063 goals [9]. This makes sure that there are working connections between top-down and bottom-up, helping to create a consensus picture of the status quo and future needs. But vertical integration is also needed to ensure that decentralization works: improved public financial management and effective delivery of services, resources and public benefits to local people.

● Integrated approach

An integrated approach to sustainable development enables countries to understand, assess and make decisions on the interdependent social, economic and environmental dimensions of sustainable development. It does this by bringing together various disciplines and sectors to improve net total benefits to society. An upstream test of integration is policy coherence. A 'downstream' test is improved well-being of people and natural systems. [10] The kinds of integration called for by sustainable development were looked at in three ways:

- (a) **Horizontal integration:** Multisector and interdisciplinary processes transcend sectoral silos, facilitate coherent policies and programmes and optimize benefits across sectors or resources
- (b) **Vertical integration:** Inclusive and multilevel strategies link relevant global, regional, national and local interests, facilitate coherent policies and programmes especially for public goods, facilitate coherence between plans and budgets and optimize benefits across these 'hierarchies'
- (c) **Stakeholder integration:** Identifying relevant stakeholders and bringing them together linking capacities, values and motivations in the common pursuit of sustainable development

A number of African countries have had tangible and measurable successes in applying an integrated and coordinated approach for development policy, planning and budgeting. Since 2007, the African continent taken as a whole has made significant economic progress. It has enjoyed an unprecedentedly long spell of growth of 4.5 per cent per year on average, with 25 per cent of countries posting 6 per cent or higher average annual growth rates and another 47 per cent of countries recording growth rates of 3.5 to 6 per cent. Over the past two years, Africa has been the world's fastest growing continent. Today, on average, people in Africa enjoy 11 per cent higher incomes than in 2011 and 15 per cent higher than in 2007, when the DWAA was launched. This is the strongest increase recorded globally, after Asia. By contrast, real income had declined in the 1980s and 1990s, which came to be perceived by many as lost decades bearing the scars of the implementation of structural adjustment programmes. New technology has made inroads into the continent, to an extent that few might have predicted. The number of Internet users has almost doubled over the past three years[10]

3 What are the challenges of sustainability in African?

The term sustainability reflects the need for careful balance between economic growth and environmental preservation. There are several challenges to sustainable development in Africa. They include:

● Poverty

Africa is a continent full of natural resources, but it is surprising to see that despite this, it is still poor. Perhaps due to the poor distribution of these resources on the African continent and especially the mismanagement of what is available. Poverty is the fundamental development challenge confronting Africa. It is connected to the environment in complex ways, particularly in natural resource-based African economies. About two-thirds of the population in African countries lives in rural areas, deriving their main income from agriculture. The poor strive to pursue livelihoods with few options outside what the natural resources available can offer. Trees are cut for fuel wood, land degrading farming systems have been adopted, wildlife are being hunted to extinction, all in an effort to satisfy today's pressing livelihood needs. Unfortunately, these activities have not only worsened the situation of the poor living in Africa today, but they will also have implications for future generations to come[11]

● Rapid Population Growth:

Africa's population may double in less than 30 years. This rapid population growth has put a lot of stress on Africa's ecosystem. Problems such as food

security, land tenure, environmental degradation and lack of water supply are often related to high rates of population growth. The African population also faces other problems such as: lack of employment, lack of access to clean and affordable energy, lack of adequate access to water, sanitation and hygiene, and increasing levels of pollution and waste. All of which, coupled with climate change, is putting people at risk of health problems and slowing down their interest in sustainable development.

●**Rapid Urbanization/ Urban Development:**

African major population highest growth is likely to be in the urban areas largely due to rural-urban migration. It is important to note that the rapid population increases accompanied by heavy rural-urban migration is leading to unprecedented rates of urban population growth, sometimes at twice the rate of national growth. Rapid urbanization in Africa has been accompanied by new and challenging environmental problems. Urbanization, coupled with weak governance and the slow pace of decentralization and local development, leads to the formation of criminals and creates a climate of war and insecurity among the population who, out of mistrust, find it difficult to come together and think for the good of all. They find themselves in a jungle where everyone fights for their own survival without caring about others, giving rise to corruption, which is a real scourge for sustainable development.[12]

●**Deforestation:**

There is a high degree of deforestation in Sub - Saharan Africa. This brings about loss of tree cover which has devastating effect on the environment. Deforestation can lead to a number of environmental maladies that over time can greatly lower agricultural yields and increase rural hardships. Removal of vegetation can expose the soil to erosion. Soil that has been carried away by heavy rains may silt rivers and pollute drinking water which could result into adverse health issues.

● **Rate of Economic Growth**

Research has shown that the very poor cause considerable environmental destruction as a direct result of their poverty. It follows that increasing the economic status of the poorest group would provide an environmental windfall. However as income and consumption levels of everyone else in the economy also rise, there is likely to be a net increase in environmental destruction. Meeting increasing consumption demand while keeping environmental degradation at a minimum is not a small task[13]

4 What is the way forward of sustainability in African?

Achieving sustainability requires setting up development goals and these goals remains an unfinished business for African countries. The SDGs fit accurately with Africa's priorities for the next fifteen years. The future of growth and its impact on poverty reduction in Africa hinges on what happens to their sustainability structural transformation. A new development trajectory of structural transformation is required to ensure improving productivity as Africa industrializes. This requires huge investment in both human and physical capital. Key priorities would be: Investment in infrastructure, especially energy; and, improvement of labor force productivity, to fit the needs of manufacturing and agro-industries. Moving forward, the Heads of States and Governments met in New York at the General Assembly in September 2015 to agree to a set of successor goals to the Millennium Development Goals (MDGs) known as Sustainable Development Goals (SDGs). Tagged "Leave No One Behind", the SDGs is different in many respects from the MDGs. It is more ambitious (17 goals and 169 targets), developed through better consultative, transparent and participatory process, and commits all countries of the world. In comparison, the MDG had limited goals and targets (8 goals and 18 targets), less consultative, transparent and participatory, and are only applicable to developing countries

In attempt of becoming a master of sustainability in the continent, some sustainable goals has clearly been defined. To reach this goal, Africans agreed on the following priorities: Development of productive capabilities through improvement in infrastructure, agriculture, industry, manufacturing, and services sectors; Innovation, science and technology; Upgrading value chains; Empowerment of youth and women and Sustainable exploitation of natural resources. Fortunately, the SDGs dovetails with Africa's priorities as articulated in the Common African Position.

Some of this Sustainable Development Goals For Africans include

- End hunger, achieve food security and improved nutrition and promote sustainable agriculture (8 targets).
- Ensure availability and sustainable management of water and sanitation for all (8 targets)
- Ensure access to affordable, reliable, sustainable, and modern energy for all (5 targets).
- Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (12 targets)
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (8 targets).
- Ensure sustainable consumption and production patterns (11 targets)

- Take urgent action to combat climate change and its impacts (5 targets).
- Conserve and sustainably use the oceans, seas, and marine resources for sustainable development (10 targets).
- Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss (12 targets).

Conclusion

A focus on ensuring the sustainability of growth, and a more pragmatic approach to addressing exclusion and marginalization remain core guiding principles for Africa. Future growth in Africa will, for most part, depend on successes in diversifying towards highly productive manufacturing and improving the productive capabilities of African economies through science and technology, especially in agriculture and afro-industrialization. Achieving these ends calls for increasing investment in key growth determinants such as physical and human capital, and improvement in the institutions that optimize the combination of these resources. Making growth more inclusive requires enhancing the capacity of segments of society with limited opportunity to participate and benefit from the continent's growth. The Sustainable Development Goals (SDG) are a universal call for action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

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